DOCUMENT RESUME

ED 161 602 RC 010 870

AUTHOR Tordella, Stephen J.; And Others
TITLE Urban and Rural Population Change in Wisconsin Counties, 1960 to 1975. Population Series 70-9.
SPONS AGENCY Wisconsin Univ., Madison. Coll. of Agricultural and Life Sciences.; Wisconsin Univ., Madison, Univ. Extension.
PUB DATE Apr 77
NOTE 62p.

EDRS PRICE MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS Area Studies; *Demography; *Migration; Population Distribution; *Population Trends; Rural Areas; *Rural Population; Tables (Data); *Urban Population; Urban to Rural Migration
IDENTIFIERS *Counties; *Wisconsin

ABSTRACT

Over the past several years significant changes have occurred in longstanding patterns of population growth within Wisconsin. Before 1960, growth occurred primarily in and around major metropolitan areas. In the 1970's a growth revival took place in nonmetropolitan counties. This, along with a sharp decline in urban growth, allowed rural growth to exceed urban for the first time since the state's formation. Annually, from 1970 to 1975, the urban population grew 0.3 percent and the rural by 1.5 percent; metropolitan counties grew 0.6 percent and the nonmetropolitan counties by 1.0 percent. Despite their remote locations, counties not adjacent to metropolitan areas are the most rapidly growing group in Wisconsin. This study examines the rural and urban population changes in the context of the unanticipated shift in growth patterns. Population data was derived from the 1960 and 1970 Censuses and the 1975 Population Estimates of the Wisconsin State Department of Administration. Tabular data for the state and for metropolitan/nonmetropolitan groupings of counties includes 1960, 1970, and 1975 urban and rural populations and average annual percent changes for the periods from 1960-1970 and 1970-1975. Urban and rural populations for each county are also given along with their average annual percent changes for urban and rural populations.
(AUTHOR/DS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED161602

POPULATION SERIES 70-9

April 1977

URBAN and RURAL POPULATION CHANGE in WISCONSIN COUNTIES 1960 to 1975

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

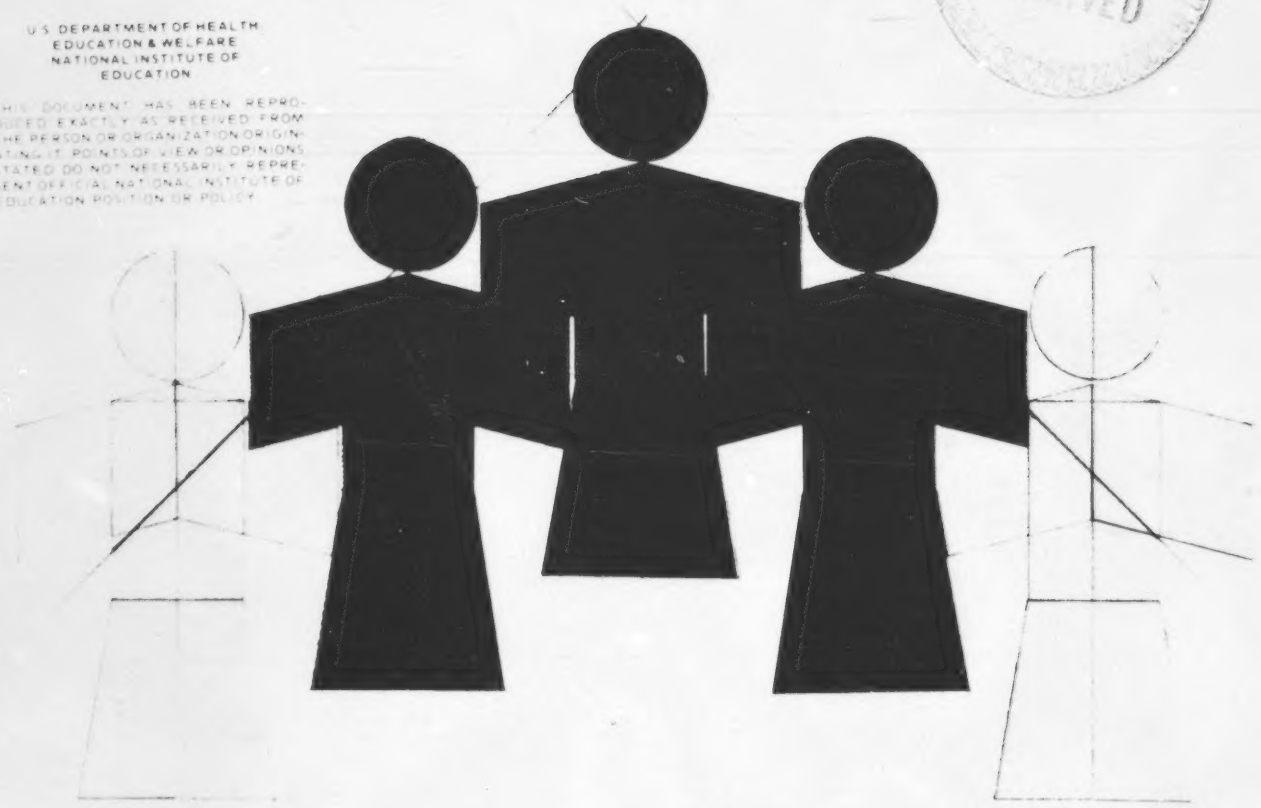
Stephen J. Taeuber

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM.

NOV 1978
ERIC/CRESS
RECEIVED

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.



RC 010870

Applied Population Laboratory
Department of Rural Sociology
College of Agricultural and Life Sciences
University of Wisconsin-Extension
University of Wisconsin-Madison
Madison, Wisconsin 53706

COOPERATIVE EXTENSION PROGRAMS
UWEX

ACKNOWLEDGMENTS

Support was provided by the College of Agriculture and Life Sciences and University Extension, University of Wisconsin, Madison. Linda M. LaMothe aggregated the data.

URBAN AND RURAL POPULATION CHANGE IN WISCONSIN COUNTIES 1960 TO 1975

Stephen J. Tordella

With Assistance From
Glenn V. Fuguitt and Doris P. Slesinger

Population Series 70-9
April, 1977
Applied Population Laboratory
Department of Rural Sociology
College of Agriculture and Life Sciences
University of Wisconsin-Extension
University of Wisconsin-Madison
Madison Wisconsin 53706

SYNOPSIS

Wisconsin growth patterns have changed significantly in recent years. There has been a growth revival in areas away from large cities. Since 1970, for the first time, nonmetropolitan areas have grown more rapidly than metropolitan areas of the state. This paper examines trends in urban and rural population change since 1960 in the context of this new pattern.

Data for 1960 and 1970 are from the U.S. Census; and those for 1975 are from the population estimates of State of Wisconsin Department of Administration. The urban definition used here approximates the one used by the Bureau of the Census.

Along with the region and nation as a whole, Wisconsin's total population growth has been slowing down. This reflects the general decline in fertility levels. During the 1960's, urban and rural populations both were growing about one percent a year. Between 1970 and 1975, however, when the state's total growth was somewhat lower, urban growth was considerably lower but rural growth had actually increased compared with the preceding decade.

In the 16 metropolitan counties (those containing a large city or closely related socially and economically to counties with a large city), changes in overall and urban growth closely follow state changes. In these areas, rural growth rates declined slightly, contrary to the state pattern. In nonmetropolitan counties geographically adjacent to metropolitan counties, urban growth rates were also lower during the second time period, but rural growth rates in these counties went

up substantially keeping overall rates the same. In counties not adjacent to metropolitan areas, overall growth rates increased, and these counties are now the most rapidly growing group in Wisconsin, despite their remote location. In this portion of the state, urban population growth, already low from 1960 to 1970, stayed the same during 1970 to 1975 while rural population growth more than doubled.

As rural and urban are measured here, a drastic decline in urban growth and a moderate increase in rural growth over the 1960 to 1975 period characterizes the new pattern of population change in Wisconsin. The overall decline in metropolitan growth is primarily due to marked decline in urban growth, whereas the resurgence of nonmetropolitan growth in the state is a rural phenomenon, rather than a new urbanization trend.

While these changes may have great impact on the nonmetropolitan areas experiencing renewed growth, the large metropolitan areas will continue to comprise a large part of the state's population. This can be seen in the continued high growth rates of the rural peripheries of the large cities.

TABLE OF CONTENTS

INTRODUCTION 1

MAJOR FINDINGS. 2

Metropolitan Counties 4

Nonmetropolitan Counties 6

DETAILED FINDINGS

Metropolitan Counties 9

Nonmetropolitan Counties

Adjacent to Metropolitan. 12

Nonadjacent to Metropolitan 14

CONCLUSION 16

TABLES 19

METHODOLOGICAL APPENDIX 48

TABLES

TABLE 1 Urban and Rural Population for the State of Wisconsin and Metropolitan-Nonmetropolitan Groupings of Counties 1960, 1970, and 1975. 19

TABLE 2 Average Annual Percent Change for the Total, Urban and Rural Populations of the State of Wisconsin and Metropolitan-Nonmetropolitan Groupings of Counties, 1960 to 1970 and 1970 to 1975. 20

TABLE 3 Urban and Rural Population and the Population of Urban Places for Wisconsin Counties, 1960, 1970 and 1975 21

TABLE 4 Average Annual Percent Change for the Total, Urban, and Rural Populations of Wisconsin Counties, 1960 to 1970 and 1970 to 1975 37

APPENDIX TABLE A
Wisconsin Townships with Unincorporated Areas Classified as Urban by the U.S. Census, 1960 51

APPENDIX TABLE B
Wisconsin Townships with Unincorporated Areas Classified by the U.S. Census, 1970 and Total 1975 Population 52

Urban and Rural Population Change

in Wisconsin Counties 1960 to 1975

INTRODUCTION

Over the past several years there have been significant changes in longstanding patterns of population growth within Wisconsin. Since at least 1920 there has been increased concentration in and around major metropolitan centers such as Milwaukee, Racine, Kenosha, Madison and Green Bay. These trends reached their peak with the rapid urban and metropolitan growth of the 1950's and 1960's.

Following initial settlement, the more rural parts of the state, particularly those in the north and those removed from large cities, usually experienced little growth or population decline. Factors contributing to this pattern included declining labor needs in agriculture and forestry, without a compensating increase in other employment opportunities.

Since 1970, new trends have become evident. In the predominantly rural nonmetropolitan counties, growth has revived. This parallels renewed nonmetropolitan growth in other states of the North Central region and the United States.[1] In Wisconsin, increased nonmetropolitan growth began to occur when growth in large metropolitan areas was slowing down.

[1] Calvin L. Beale, The Revival of Population Growth in Nonmetropolitan America, June 1975, Economic Research Service, United States Department of Agriculture.

Glenn V. Fuguitt and Calvin L. Beale, Population Change in Nonmetropolitan Cities and Towns, February 1976, Economic Research Service, United States Department of Agriculture.

Calvin L. Beale and Glenn V. Fuguitt, The New Pattern of Nonmetropolitan Population Change, CDE Working Paper 75-22, Revised 1976, Center for Demography and Ecology, University of Wisconsin-Madison.

Thus, for the first time, nonmetropolitan counties as a whole are growing more rapidly than metropolitan counties.

This study examines rural and urban population changes in the context of this unanticipated shift in growth patterns. From the beginning of settlement in the state, cities grew faster than the remainder of the state even though rural areas around larger places attracted an increasing share of the total. Does the new trend in population change mean rural areas are now growing more rapidly than urban? Is the increased growth of nonmetropolitan areas an extension of urban sprawl into more remote areas, or primarily rural growth away from larger cities? This study attempts to answer such questions about the state as a whole, and seeks to provide specific information concerning counties and other subareas of the state.

This report is organized as follow: first, a short summary of concepts and methods, with more detailed information provided in the appendix; second, a discussion of the urban and rural growth of metropolitan and nonmetropolitan groups of counties, with county-by-county comparisons; and third, the conclusions. The data tables follow: Tables 1 and 2 apply to the state, and metropolitan-nonmetropolitan groups of counties; tables 3 and 4 contain information on individual counties and the urban places located within them.

METHODOLOGY

The urban and rural population data are derived from the 1960 and 1970 U.S. Censuses and the 1975 Population Estimates of the Wisconsin State Department of Administration. Since the latter offers estimates only for townships and incorporated cities and villages, the urban and rural categories for 1960, 1970 and 1975 were constructed using only those geographic areas. The "urban" population is defined in this report

and in the U.S. Census as all those residing in places of 2,500 or more, and in heavily settled areas around large cities. However, there are slight differences between the urban-rural estimates contained here and those of the Census due to the geographic limitations of the 1975 data. These differences are small and their potential effects are detailed in the methodological appendix.

In order to examine these changes in urban and rural growth patterns, counties were grouped according to their 1975 metropolitan status.

"Metropolitan" counties are counties which the Office of Statistical Standards of the U.S. Bureau of the Budget designates as part of a Standard Metropolitan Statistical Area (SMSA). A SMSA consists of a city or twin cities of at least 50,000 population, the county in which the cities are located, and surrounding counties having specific social and economic relationships with the county containing the central city. Essentially, the metropolitan counties are counties continaing large cities and their suburbs.[2]

Nonmetropolitan counties are divided into two categories according to their proximity to metropolitan counties. Those counties classified as adjacent to metropolitan (or simply, adjacent counties) share a boundary with metropolitan (SMSA) counties. A "spillover" from metropolitan counties may affect adjacent counties, so they are considered separately from nonadjacent counties.

[2] In 1975, Wisconsin had eight areas which were designated as SMSA's and parts of two Minnesota SMSA's, comprising a total of sixteen metropolitan counties. The eight SMSA's which were within the state were: Appleton-Oshkosh (Calumet, Outagamie, and Winnebago counties); Eau Claire (Chippewa and Eau Claire counties); Green Bay (Brown county); Kenosha (Kenosha county); La Crosse (La Crosse county); Madison (Dane county); Milwaukee (Milwaukee, Ozaukee, Washington, and Waukesha counties); and Racine (Racine county). The two parts of SMSA's in the state were: St. Croix county of the Minneapolis-St. Paul SMSA; and Douglas county of the Duluth-Superior SMSA.

Nonmetropolitan, nonadjacent counties are neither metropolitan nor do they bound on metropolitan counties. Figure 1 shows the Metropolitan, Adjacent, and Nonadjacent counties of Wisconsin.

The measure of population change used is the Average Annual Rate of Change. Since this rate is expressed in annual terms, the rates of change for different length periods are directly comparable. To prevent a change in urban classification from affecting the rates, measurement of rural and urban growth with average annual change rates was performed on constant urban-rural groupings determined at the beginning of each period. Detailed descriptions of these and all methods are in the methodological appendix.

MAJOR FINDINGS

Wisconsin as a whole had a lower annual rate of growth from 1970 to 1975 (0.7%) than it had from 1960 to 1970 (1.1%). Tables 1 and 2 show that this lowered overall growth rate reflected the sharp drop in urban growth. From 1960 to 1970, urban and rural populations grew at approximately the same annual rate (1.1% and 1.2% respectively), but the urban population grew by only 0.3% annually while the rural population increased its growth rate to 1.5% annually and also surpassed the urban population in absolute growth.

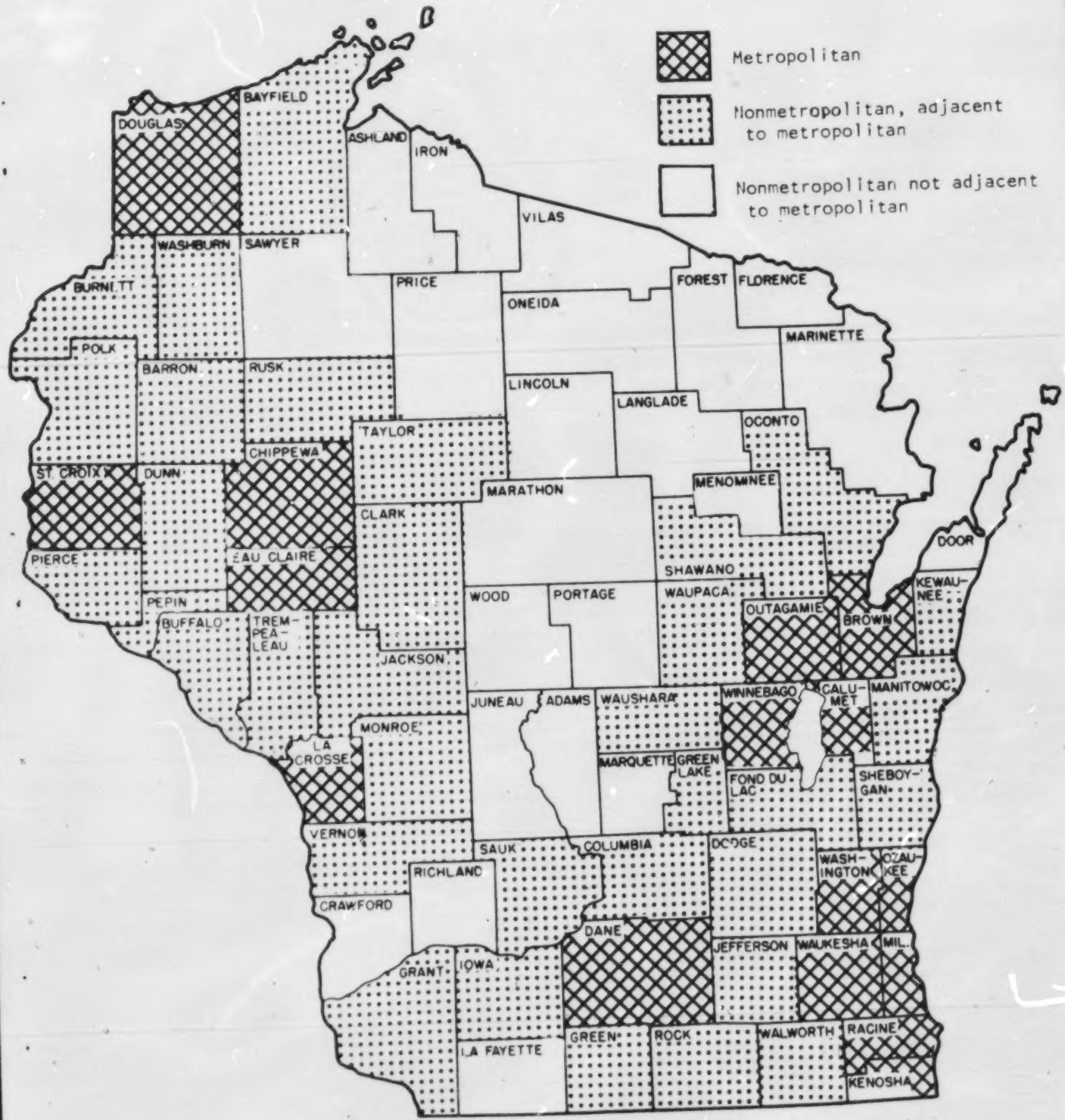
The sources of these changing urban and rural growth patterns emerge when county growth is analyzed by metropolitan status.

METROPOLITAN COUNTIES

Included in the metropolitan counties in 1975 was 75% of the urban and 32% of the rural population of Wisconsin. With such a large proportion of the urban population in metropolitan counties, it is not surprising that growth rates of this segment paralleled the drop of the state's urban growth rates. From 1960 to 1970, the urban population of the metropolitan

Figure 1

METROPOLITAN NONMETROPOLITAN STATUS, 1975



counties grew by 1.1% annually; but during 1970 to 1975 the growth rate was only 0.3% annually. This slowdown of urban growth was due to reduced urban growth rates in most of Wisconsin's SMSA's, especially older and larger ones.

The rural growth rate of the metropolitan counties also declined, but only slightly: from 2.3% annually during 1960 to 1970 to 2.0% annually during 1970 to 1975. This slight drop was due to reduced rural growth in some metropolitan counties having quite high growth from 1960 to 1970.

Thus, rural growth in the metropolitan counties occurred at a high rate (2% annually or greater) over both periods studied. Urban growth in these counties dropped to a very low level from the first period to the second. This drop is reflected in the overall (rural plus urban) growth rate of metropolitan counties which was 1.4% annually from 1960 to 1970 and 0.6% annually from 1970 to 1975.

NONMETROPOLITAN COUNTIES

When the nonmetropolitan counties are considered together, they demonstrate an increase in their overall growth rate from 0.7% annually in the first period to 1.0% annually during the second. This is contrary to decreases in overall growth rates over the two periods in both the state as a whole and the metropolitan counties. The nonmetropolitan counties did follow state and metropolitan patterns with respect to urban growth rates, however. Urban growth rates dropped from 0.9% annually during the first period to 0.5% annually during the second period.

At the same time the rural segment of the nonmetropolitan counties increased its annual growth rate from 0.6% to 1.2%. This increase was important for several reasons. First, the nonmetropolitan rural population constituted 68% of the state's 1975 rural population. Therefore the increased growth rate applied to a large segment of the state's population.

Second, this was the only segment of the state's population having a higher growth rate from 1970 to 1975 than from 1960 to 1970. Table 2 shows both the urban and rural segments of the metropolitan population, and the urban segment of the nonmetropolitan population had lower growth rates during the second period than during the first. Third, increased rural growth rates were part of an urban and rural growth rate reversal over the two periods in nonmetropolitan counties. During 1960 to 1970, the urban population grew at a higher rate than the rural, but from 1970 to 1975 the rural growth rates exceeded the urban. Thus, the nonmetropolitan counties assumed the decentralizing growth pattern of rural growth exceeding urban which had been present in the metropolitan counties in the first period. Finally, these growth patterns indicate growth revival in nonmetropolitan counties was primarily a rural phenomenon.

In the study of nonmetropolitan growth patterns, it is useful to separate those counties adjacent to metropolitan counties from those which are not. By grouping the counties according to adjacency, the effects of "spillover" growth from metropolitan counties can be differentiated.

ADJACENT COUNTIES

Adjacent counties, containing 48 percent of the state's rural population and 17% of the urban population in 1975, had the same overall growth rate during both periods, 0.8% annually. As with adjacent and nonadjacent counties considered together, adjacent counties had an urban and rural growth reversal over the two periods. Urban growth dropped from 1.1% annually from 1960 to 1970 to 0.5% annually from 1970 to 1975. Most individual adjacent counties displayed this pattern of reduced urban growth, with the few exceptions being counties with small urban populations. Rural growth rates in adjacent counties increased over the two periods from 0.6% to 1.1% annually. Most adjacent counties either increased or

maintained their rural growth rates, causing the overall increase.

NONADJACENT COUNTIES

Figure 1 shows that nonmetropolitan counties not adjacent to metropolitan counties, occupy a diagonal strip across the state from the southwest extending to and including the northeastern portion of the state. The 22 nonadjacent counties held 20% of the state's 1975 rural population. Eight of the 22 counties had no urban population, and the remaining 14 accounted for 7% of the state's 1975 urban population.

In nonadjacent counties urban growth was maintained at 0.5% annually over both periods, making nonadjacent counties the only grouping in the state to maintain urban growth. This pattern, however, applies only to a small proportion of the state's urban population because many nonadjacent counties have no urban population, or only one small urban place.

Rural growth rates in these counties increased from 0.8% annually in the first period to 1.7% annually from 1970 to 1975, as a result of increases in most individual counties.

This increase shows that even if all rural growth in adjacent counties were credited to spillover from metropolitan counties, there was still revived nonmetropolitan growth in the nonadjacent counties. It is quite unkikely all growth in adjacent counties was due to their closeness to metropolitan areas, especially around the newest metropolitan counties, Eau Claire, Chippewa and St. Croix. Thus, there has been a revival of nonmetropolitan growth in Wisconsin affecting primarily the rural population.

The above shows that there are important differences in rural and urban growth rates, and between time periods studied, among metropolitan, adjacent, and nonadjacent counties when these counties are considered as groups. Within these three categories of counties however, there are

also variations in rural and urban growth. These variations are examined below.

DETAILED FINDINGS

Tables 3 and 4 contain detailed information for each county. Table 3 shows for 1960, 1970 and 1975, the total population, the urban population, the size of each urban place, and the rural population. Table 4 shows average annual growth rates for the total, urban and rural populations from 1960 to 1970 and 1970 to 1975. These data will be analyzed by county in metropolitan-nonmetropolitan groupings.

METROPOLITAN COUNTIES

There are many similarities in the growth patterns of the metropolitan counties when they are considered in the SMSA groups to which they belong. The most pervasive pattern is an urban growth slowdown over the two periods, 1960 to 1970 and 1970 to 1975.

Milwaukee

The slowdown of urban growth is most apparent in the Milwaukee SMSA. Milwaukee county, which is completely urban, had only slight growth (0.2% annually) from 1960 to 1970, and a decline in population (-0.8% annually) from 1970 to 1975. At the same time, the three outlying counties of the SMSA, Ozaukee, Washington, and Waukesha, were experiencing some of the highest overall growth rates in the state (2.5% to 3.8% annually). Within those counties during both periods, the urban growth rates exceeded the rural, except for Waukesha county, from 1970 to 1975. The rural growth rates, which were lower in the second period than during the first, were still quite high when compared with the rest of the state. Thus the Milwaukee SMSA over both periods exhibited a pattern of high growth rates in the outlying counties, while totally urban Milwaukee county fell into decline.

Duluth-Superior

An urban growth slowdown is evident in other SMSA's also. The urban population of Douglas county, part of the Duluth-Superior SMSA, declined over both periods, shrinking by -0.4% annually from 1960 to 1970 and by -1.2% annually from 1970 to 1975. The rural population, however, grew by 0.8% annually from 1960 to 1970 and 1.6% annually from 1970 to 1975.

LaCrosse

The LaCrosse SMSA (or county) had a growth pattern similar to Douglas county. Although the urban population of La Crosse was growing by 1.0% annually from 1960 to 1970, in the 1970 to 1975 period the rate was reversed to a -0.1% annual decline. The rural growth rate exceeded the urban during the first period when it was 1.2% annually. In the second period it rose to 2.6% annually.

Madison

In Dane county, the Madison SMSA, the high urban growth rate of 2.7% annually in the first period dropped to only 0.3% annually in the second, while rural growth rates went from 2.7% to 3.3% annually.

Green Bay, Appleton-Oshkosh, Kenosha

Less precipitious drops in urban growth rates compared with rural rates occurred in three other SMSA's: Green Bay, Kenosha, and Appleton-Oshkosh. In Brown and Kenosha counties (the Green Bay and Kenosha SMSA's), the urban populations grew at a slower rate in the second period than they had from 1960 to 1970, but the rural populations grew at the same rate over both periods. In the Appleton-Oshkosh SMSA (Calumet, Outagamie and Winnebago counties), the urban growth rates also dropped in the second period, but rural rates dropped with them. It should be noted that although urban growth rates declined in these three SMSA's, the rates were still generally greater than 1% annually from 1970 to 1975.

Other Metropolitan Counties

In general, metropolitan counties reflected the state pattern of reduced urban growth rates over the two periods, and the rural growth rates in these counties were generally maintained. The SMSA's conformed to this pattern in varying degrees, however, and the state's newest metropolitan counties were among the exceptions. In St. Croix county, the Minneapolis-St. Paul SMSA, the urban rate of increase equalled the rural in the first period at 1.6% annually. In the second period both rates increased with urban at 2.3% and rural at 2.6% annually. In Eau Claire and Chippewa counties, recently designated the Eau Claire SMSA, the urban rates of increase were greater than the rural for both periods, and the urban rates increased and the rural decreased in the second period. The Racine SMSA, or county, had a 0.8% annual increase in its urban population across both periods, while its rural population dropped from the high 3.7% annual increase in the first period to 1.4% annually during the second.

The growth patterns exhibited by metropolitan counties taken as a whole (seen on Tables 1 and 2), therefore, are the result of a range of patterns of individual SMSA groups of those counties. A large drop in urban growth rates from the first to the second periods occurred in most of these counties, causing the urban growth rate in the metropolitan counties to drop from 1.1% annually during 1960 to 1970 to 0.3% annually during the second period. Changes in rural growth patterns were less uniform, however. In no county was the rural population in decline during either period. Decreases in rural growth rates in 8 of the 16 metropolitan counties caused a slight drop in the high overall rural growth rates from 2.3% annually in the first period to 2.0% in the second.

ADJACENT COUNTIES

Adjacent counties are nonmetropolitan counties sharing a border with a metropolitan or SMSA county. The growth patterns of these counties will be considered generally in groups bordering on particular SMSA's.

Around the Madison SMSA to the north, west and south are Columbia, Sauk, Iowa, Green, and Rock counties. In all these counties, the rural growth rates remained stable or increased over the two periods, but all the rates were less than 1.2% annually. The urban growth rates were also relatively small, and were lower in the second period than the first in Rock (which has a substantial urban population), Sauk, and Iowa counties; about the same for both periods in Columbia county; and up in the second period in Green county. There were, therefore, no uniform trends of urban population growth in these counties.

Dodge and Jefferson counties are between the Madison and Milwaukee SMSA's. Walworth county is just south and adjoins the Milwaukee, Racine and Kenosha SMSA's. Rural growth rates exceeded urban in these counties over both periods, except for Walworth from 1960 to 1970. The overall growth rate was significantly lower in the second period in Jefferson and Walworth counties. Decreases in both the urban and rural growth rates caused this decline in Jefferson county; while in Walworth county the rural rate of increase was maintained at about 1.8% annually and the urban growth rate dropped from 2.2% to 0.1% annually. Dodge county maintained its growth over the periods.

Around the Green Bay and Appleton-Oshkosh SMSA's are nine adjacent counties. All these counties except Shawano from 1960 to 1970 had postitive overall growth rates for both periods. Comparing urban and rural growth rates shows that rural growth predominated, especially from 1970 to 1975. To the north and east, in Oconto, Shawano, Waupaca

and Waushara counties, the overall growth rates were higher in the second period than in the first. These higher growth rates were due to increases in rural growth rates, ranging from -0.8% to 0.9% annually in the first period and from 0.9% to 1.9% annually in the second period. Urban growth rates in these counties were generally stable over the two periods except for the special case of Waushara county. Waushara had 41 people of Berlin city (located mainly in Green Lake county) classified as urban in 1970, and 55 in 1975 causing the annual growth rate of 5.8% for that period.

The balance of counties around the Green Bay and Appleton-Oshkosh SMSA's are south and east. All these counties had reduced overall growth rates over the two periods. Except in Fond du Lac and Sheboygan counties, reductions were largely due to drops in urban growth rates, which in three counties became negative. Rural growth rates also dropped, but not to the same extent.

In the state's northwest corner, the Duluth-Superior SMSA (Douglas county), are the adjacent counties Bayfield, Washburn, and Burnett. These completely rural counties show a significant growth upturn: from 1960 to 1970 growth rates ranged from -0.2% to 0.3%; and in the second period the range moved up to 1.1% to 2.8% annual increase.

The remaining adjacent counties around the Eau Claire, Minneapolis-St. Paul (St. Croix county) and La Crosse SMSA's and Grant county adjacent to the Dubuque SMSA in Iowa, display similar increased rural growth. In all these predominantly rural counties, except Monroe, the rural growth rate was higher in 1970 to 1975 than from 1960 to 1970. Six of these counties changed from having declining rural populations from 1960 to 1970 to growth rates ranging up to 1.2% annually from 1970 to 1975.

In the urban sector, four of these counties had no population. Five counties, Pierce, Dunn, Rusk, Vernon, and Grant had populations with lower (and in four cases negative) urban growth rates in the second period than

the first; and five counties, Barron, Monroe, Clark, Jackson, and Taylor had higher urban growth rates in the second period than the first. It should be noted that in the five counties having higher urban growth rates in the second period, there were only one or two small urban places in the county.

In sum, then, 25 of the 34 nonmetropolitan counties adjacent to metropolitan counties had rural growth rates which were higher from 1970 to 1975 than they were from 1960 to 1970. Table 2 shows the rural growth rate for adjacent counties as a group increased from 0.6% to 1.1% annually over the periods studied. The urban population had just the opposite pattern, a decrease from 1.1% to 0.5% annual growth.

NONADJACENT COUNTIES

Nonadjacent counties of the southwest corner are Lafayette, Crawford, and Richland, and Juneau county toward the center of the state. These counties had no consistent growth patterns except for greater rural growth rates in the second period, than the first.

In the center of the state, Adams, Marquette, Wood, Portage, Marathon, and Lincoln counties all had growth over both periods, with generally higher growth rates from 1970 to 1975. Significant increases in rural growth rates in all these counties but Marathon produced these higher rates. Three of these counties' rural growth rates were among the highest in the state from 1970 to 1975: Adams at 3.8%; Portage at 3.3%; and Lincoln at 2.5% annually. At the same time, urban growth was greatly reduced in Portage and Wood counties, where it had exceeded rural growth from 1960 to 1970. Marathon county had an increase in overall growth rates over the two periods due to an increase in urban growth, while its rural growth rate dropped only slightly. In general, therefore, the

center of the state experienced much rural growth from 1970 to 1975.

Just below the northeastern border counties are Sawyer, Price, Oneida, Langlade, and Menomoniee counties. Urban growth rates were less than rural for both periods in the three counties with urban populations. Rural growth rate increases caused higher overall growth rates in the second period than in the first in all these counties. Sawyer and Oneida counties as a result displayed quite high (2.3% and 3.8% annually) rural rates in the second period.

The rest of the nonadjacent counties, stretching from Ashland to Door county on the northeastern border of the state, had a variety of growth patterns. Ashland and Iron counties had negative or negligible growth rates for urban and rural population over both periods. The totally rural counties of Vilas, Forest, and Florence had increases in rural growth rates over the two periods, with Forest and Florence changing from negligible and negative growth in the first period, to growth rates of 1.2% annually from 1970 to 1975. Vilas county increased from 1.6% to the high 3.2% annual growth rate. Marinette and Door counties had increased overall and rural growth rates from the first to the second periods. In the urban sector, however, Marinette county declined over both periods while Door county had a turnaround from a negative rate to one equalling its rural rate during the second period at 1.9% annually.

Clearly, the increase in overall rural growth rate for nonadjacent counties (shown on Table 2) was the result of increased rural growth in the majority of nonadjacent counties (18 of 22). Some central and northeastern counties had large increases in their rural growth rates over the two periods.

Urban growth trends varied among nonadjacent counties, but the overall urban growth rate of 0.5% annually did not change over the two periods.

CONCLUSION

Before 1960, population growth in Wisconsin occurred primarily in and around major metropolitan centers. High urban and rural growth rates in metropolitan areas led to population concentration in the southeast around Milwaukee, Racine, and Kenosha, and also around Madison and Green Bay. In nonmetropolitan areas, which were predominantly rural, there was a history of decline and slow growth.

During the decade 1960 to 1970, metropolitan counties continued to grow faster than nonmetropolitan counties, 1.4% annually compared to 0.7% annually. The urban population was growing in most metropolitan counties except Milwaukee, where there was only marginal growth. The rural population of metropolitan counties grew quite rapidly, by 2.3% annually. This rate was the highest of any segment of the state's population.

In nonmetropolitan counties, growth was slower. The urban population grew at about the same rate as that of the urban sectors of metropolitan areas. The urban population subject to that growth rate, however, was small in size. The rural population was growing by only 0.6% annually, quite low compared to metropolitan rural growth.

The population growth trends during the first half of the 1970's were quite different from the past. In metropolitan areas, overall annual growth was 0.6%, much lower than the 1.4% of the 1960's. The main reason for this was reduced urban population growth. The central cities of SMSA's followed Milwaukee's lead from the 1960's with low growth rates. Urban growth rates dropped in the majority of metropolitan

counties from their 1960 to 1970 levels.

The metropolitan rural population continued to grow rapidly, but by 2.0% per year instead of the 2.3% of the 1960's. Thus, concentration of population in metropolitan areas continued, but at a slower rate, and in a decentralizing pattern.

In nonmetropolitan counties, there was a significant change from both the historic and 1960's growth patterns. In the 1970's, a growth revival took place. Increased rural growth rates were the source of revived nonmetropolitan growth, because urban growth rates declined over the two periods. Renewed growth occurred not only in adjacent, but also nonadjacent nonmetropolitan counties, showing that the nonmetropolitan resurgence was not merely an expansion of metropolitan growth into adjacent counties.

Urban and rural growth patterns during 1970 to 1975 combined to allow rural growth in the state to exceed urban in both absolute amount and growth rate for the first time since the state's formation. This occurred as a result of the sharp decline of urban growth in metropolitan counties, and an increase in rural growth in nonmetropolitan counties.

The data document two important trends in Wisconsin in the 1970's: the revival of nonmetropolitan growth; and rural growth exceeding urban. The idea that these changes actually occurred in the 1970's, however, is in part an artifact of the methods used. The population data were aggregated from "snapshots" at three points in time (1960, 1970, and 1975), causing changes to be apparent between the 1960's and the 1970's. Several patterns within this data can demonstrate that these changes actually were the result of continuing processes in time, and in the context of the North Central Region and the whole United States.

The statewide slowdown of urban growth in the metropolitan areas was foreshadowed by similar slowdowns in Milwaukee and in cities of other states.

However, this continuing process has not yet affected the newest Wisconsin SMSA, Eau Claire.

Revived nonmetropolitan growth, as mentioned above, occurred not only in Wisconsin, but also in the North Central Region and the whole United States. Therefore, while the changes documented above are new, they are part of a continuing process in Wisconsin, the region and the country.

Table 1

Urban and Rural Population for the State of Wisconsin and Metropolitan/Non-metropolitan Groupings of Counties 1960, 1970, and 1975[a]

Area	1960	1970	1975
STATE TOTAL	3,952,771	4,417,821	4,581,701
Urban	2,515,328	2,900,449	2,974,107
Rural	1,437,443	1,517,372	1,607,594
METROPOLITAN COUNTIES	2,350,452	2,692,518	2,722,181
Urban	1,905,602	2,215,876	2,262,744
Rural	444,850	476,642	509,437
NON-METROPOLITAN COUNTIES	1,602,319	1,725,303	1,809,520
Urban	609,726	684,573	711,363
Rural	992,593	1,040,730	1,098,157
ADJACENT TO METROPOLITAN COUNTIES	1,142,555	1,233,520	1,287,016
Urban	434,301	493,917	510,184
Rural	708,254	739,603	776,832
NOT ADJACENT TO METROPOLITAN COUNTIES	459,764	491,783	522,504
Urban	175,425	190,656	201,179
Rural	284,339	301,127	321,325

[a]Urban-rural definition differs slightly from that of U.S. Census. See text.

Table 2

Average Annual Percent Change for the Total, Urban and Rural Populations of the State of Wisconsin and Metropolitan/Non-metropolitan Groupings of Counties, 1960 to 1970 and 1970 to 1975[a]

Area	1960 to 1970	1970 to 1975
STATE TOTAL	1.1	0.7
Urban	1.1	0.3
Rural	1.2	1.5
METROPOLITAN COUNTIES	1.4	0.6
Urban	1.1	0.3
Rural	2.3	2.0
NON-METROPOLITAN COUNTIES	0.7	1.0
Urban	0.9	0.5
Rural	0.6	1.2
ADJACENT TO METROPOLITAN COUNTIES	0.8	0.8
Urban	1.1	0.5
Rural	0.6	1.1
NOT ADJACENT TO METROPOLITAN COUNTIES	0.7	1.2
Urban	0.5	0.5
Rural	0.8	1.7

[a]Urban-rural definition differs slightly from that of U.S. Census. See text.

Table 3

Urban and Rural Population and the Population of Urban Places for Wisconsin Counties, 1960, 1970, and 1975[a]

Area	1960	1970	1975
ADAMS COUNTY	7,566	9,234	11,159
Urban	---	---	---
Rural	7,566	9,234	11,159
ASHLAND COUNTY	17,375	16,743	16,046
Urban	10,132	9,615	9,116
Ashland City	10,132	9,615	9,116
Rural	7,243	7,128	6,930
BARRON COUNTY	34,270	33,955	36,078
Urban	7,303	7,278	7,688
Rice Lake City	7,303	7,278	7,688
Rural	26,967	26,677	28,390
BAYFIELD COUNTY	11,910	11,683	12,324
Urban	---	---	---
Rural	11,910	11,683	12,324
BROWN COUNTY[b]	125,082	158,244	170,771
Urban	100,877	129,824	140,178
De Pere City	10,045	13,309	14,739
Green Bay City	62,888	87,809	90,796
Howard Village	3,485	4,911	6,284
Allouez Town	9,557	13,753	15,474
Ashwaubenon Town	2,657	10,042	12,885
Preble Town	12,245	---	---
Rural	24,205	28,420	30,593

Table 3

Area	1960	1970	1975
BUFFALO COUNTY	14,202	13,743	14,029
Urban	---	---	---
Rural	14,202	13,743	14,029
BURNETT COUNTY	9,214	9,276	10,690
Urban	---	---	---
Rural	9,214	9,276	10,690
CALUMET COUNTY	22,268	27,604	29,668
Urban	4,502	12,329	14,039
Appleton City	1,653	3,401	4,560
Brillion City	(1,783)	2,588	2,669
Chilton City	2,578	3,030	3,015
Kiel City	271	298	434
New Holstein City	(2,401)	3,012	3,361
Rural	17,766	15,275	15,629
CHIPPEWA COUNTY	45,096	47,717	49,691
Urban	15,266	16,451	17,791
Bloomer City	2,834	3,143	3,214
Chippewa Falls City	11,708	12,351	13,245
Eau Claire City	724	957	1,332
Rural	29,830	31,266	31,900
CLARK COUNTY	31,527	30,361	31,492
Urban	2,728	2,750	2,821
Neillsville City	2,728	2,750	2,821
Rural	28,799	27,611	28,671

Table 3

Area	1960	1970	1975
COLUMBIA COUNTY	36,708	40,150	42,026
Urban	11,289	11,610	11,827
Columbus City	3,467	3,789	3,969
Portage City	7,822	7,821	7,858
Rural	25,419	28,540	30,199
CRAWFORD COUNTY	16,351	15,252	15,603
Urban	5,649	5,540	5,700
Prairie du Chien City	5,649	5,540	5,700
Rural	10,702	9,712	9,903
DANE COUNTY[b]	222,095	290,272	305,527
Urban	168,648	222,979	235,121
Mc Farland Village	1,272	2,386	2,926
Mount Horeb Village	(1,991)	(2,402)	2,793
Oregon Village	(1,701)	2,553	3,352
Verona Village	(1,471)	(2,224)	3,002
Waunakee Village	(1,611)	(2,181)	3,086
Madison City	126,706	171,769	168,518
Middleton City	4,410	8,286	10,794
Monona City	8,178	10,420	10,014
Stoughton City	5,555	6,096	7,334
Sun Prairie City	4,008	9,935	12,486
Maple Bluff Village	1,565	1,974	1,620
Shorewood Hills Village	2,320	2,206	1,815
Blooming Grove Town	9,709	1,608	1,403
Madison Township	4,925	5,746	5,978
Rural	53,447	67,293	70,406
DODGE COUNTY	63,170	69,004	72,193
Urban	29,538	31,614	32,802
Beaver Dam City	13,118	14,265	14,382
Horicon City	2,996	3,356	3,574
Mayville City	3,607	4,139	4,405
Watertown City	3,968	4,373	5,060
Waupun City	5,849	5,481	5,381
Rural	33,632	37,390	39,391

Table 3

Area	1960	1970	1975
DOOR COUNTY	20,685	20,106	22,140
Urban	7,353	6,776	7,449
Sturgeon Bay City	7,353	6,776	7,449
Rural	13,332	13,330	14,691
DOUGLAS COUNTY	45,008	44,657	43,728
Urban	33,937	32,713	30,781
Superior City	33,563	32,237	30,291
Superior Village	374	476	490
Rural	11,071	11,944	12,947
DUNN COUNTY	26,156	28,991	29,813
Urban	8,624	11,112	10,539
Menomonie City	8,624	11,112	10,539
Rural	17,532	17,879	19,274
EAU CLAIRE COUNTY	58,300	67,219	72,052
Urban	37,263	46,504	50,369
Altoona City	(2,114)	2,842	4,136
Eau Claire City	37,263	43,662	46,233
Rural	21,037	20,715	21,683
FLORENCE COUNTY	3,437	3,290	3,500
Urban	---	---	---
Rural	3,437	3,298	3,500

Table 3

Area	1960	1970	1975
FOND DU LAC COUNTY	75,085	84,567	87,385
Urban	43,517	48,319	50,260
No. Fond du Lac Village	2,549	3,286	3,864
Fond du Lac City	32,719	35,515	36,546
Ripon City	6,163	7,053	7,082
Waupun City	2,086	2,465	2,768
Rural	31,568	36,248	37,125
FOREST COUNTY	7,542	7,691	8,184
Urban	---	---	---
Rural	7,542	7,691	8,184
GRANT COUNTY	44,419	48,398	50,339
Urban	13,268	15,865	15,400
Boscobell City	2,608	2,510	2,551
Lancaster City	3,703	3,756	3,895
Platteville City	6,957	9,599	8,954
Rural	31,151	32,533	34,939
GREEN COUNTY	25,851	26,714	28,541
Urban	8,050	11,169	12,364
Brodhead City	(2,444)	2,515	2,917
Monroe City	8,050	8,654	9,447
Rural	17,801	15,545	16,177
GREEN LAKE COUNTY	15,418	16,878	17,332
Urban	4,793	5,297	5,219
Berlin City	4,793	5,297	5,219
Rural	10,625	11,581	12,113

Table 3

Area	1960	1970	1975
IOWA COUNTY	19,631	19,306	19,387
Urban	2,911	3,255	3,350
Dodgeville City	2,911	3,255	3,350
Rural	16,720	16,051	16,037
IRON COUNTY	7,830	6,533	6,684
Urban	2,763	---	---
Hurley City	2,763	(2,418)	(2,268)
Rural	5,067	6,533	6,684
JACKSON COUNTY	15,151	15,325	15,679
Urban	3,195	3,273	3,447
Black River Falls City	3,195	3,273	3,447
Rural	11,956	12,052	12,232
JEFFERSON COUNTY	50,094	60,060	62,968
Urban	25,382	31,368	32,799
Fort Atkinson City	7,908	9,164	9,703
Jefferson City	4,548	5,429	5,651
Lake Mills City	2,951	3,556	3,845
Watertown City	9,975	11,310	11,808
Whitewater City	---	1,909	1,792
Rural	24,712	28,692	30,169
JUNEAU COUNTY	17,490	18,455	18,636
Urban	3,531	3,466	3,360
Mauston City	3,531	3,466	3,360
Rural	13,959	14,989	15,276

Table 3

Area	1960	1970	1975
KENOSHA COUNTY[b]	100,615	117,917	126,651
Urban	67,899	78,805	86,919
Kenosha City	67,899	78,805	83,804
Twin Lakes Village	(1,497)	(2,276)	3,115
Rural	32,716	39,112	39,732
KEWAUNEE COUNTY	18,282	18,961	19,233
Urban	6,627	6,924	6,697
Algoma City	3,855	4,023	3,844
Kewaunee City	2,772	2,901	2,853
Rural	11,655	12,037	12,536
LA CROSSE COUNTY[b]	72,465	80,468	83,043
Urban	50,736	59,389	59,078
La Crosse City	47,575	51,153	48,141
Onaloaska City	3,161	4,909	7,283
Campbell Town	(2,296)	3,327	3,654
Rural	21,729	21,079	23,965
LAFAYETTE COUNTY	18,142	17,456	18,227
Urban	---	---	---
Rural	18,142	17,456	18,227
LANGLADE COUNTY	19,916	19,220	19,394
Urban	9,691	9,005	8,862
Antigo City	9,691	9,005	8,862
Rural	10,225	10,215	10,532

Table 3

Area	1960	1970	1975
LINCOLN COUNTY	22,338	23,499	25,149
Urban	12,799	12,921	13,162
Merrill City	9,451	9,502	9,325
Tomahawk City	3,348	3,419	3,837
Rural	9,539	10,578	11,987
MANITOWOC COUNTY	75,215	82,294	82,859
Urban	46,921	49,712	49,180
Kiel City	2,253	2,550	2,725
Manitowoc City	32,275	33,430	33,225
Two Rivers City	12,393	13,732	13,230
Rural	28,294	32,582	33,679
MARATHON COUNTY[b]	88,874	97,457	104,190
Urban	41,672	53,918	60,480
Rothschild Village	2,550	3,141	3,436
Marshfield City	---	59	153
Mosinee City	(2,067)	(2,395)	2,753
Schofield City	3,038	2,577	3,251
Wausau City	31,943	32,806	32,899
Rib Mountain Town	(3,381)	4,785	5,285
Stettin Town	4,141	4,199	4,383
Weston Town	(2,924)	6,351	8,320
Rural	47,202	43,539	43,710
MARINETTE COUNTY	34,660	35,810	37,078
Urban	15,833	15,532	15,188
Marinette City	13,329	12,696	12,309
Peshtigo City	2,504	2,836	2,879
Rural	18,827	20,278	21,890

Table 3

Area	1960	1970	1975
MARQUETTE COUNTY	8,516	8,865	9,692
Urban	---	---	---
Rural	8,516	8,865	9,692
MENOMINEE COUNTY	---	2,607	2,644
Urban	---	---	---
Rural	---	2,607	2,644
MILWAUKEE COUNTY	1,036,047	1,054,249	1,012,536
Urban	1,036,047	1,054,249	1,012,536
Bayside Village	3,078	4,338	4,430
Brown Deer Village	11,280	12,582	13,570
Cudahy City	17,975	22,078	21,653
Fox Point Village	7,315	7,939	7,911
Franklin City	10,006	12,247	13,950
Glendale City	9,537	13,426	13,480
Greendale Village	6,843	15,089	16,844
Greenfield City	17,636	24,424	31,651
Hales Corners Village	5,549	7,771	8,773
Milwaukee City	741,324	717,372	670,663
Oak Creek City	9,372	13,928	15,748
River Hills Village	1,257	1,561	1,547
St. Francis City	10,065	10,489	9,925
Shorewood Village	15,990	15,576	14,336
South Milwaukee City	20,307	23,297	23,390
Wauwatosa City	56,923	58,676	55,712
West Allis City	68,157	71,649	68,966
West Milwaukee Village	5,043	4,405	3,787
Whitefish Bay Village	18,390	17,402	16,200
Rural	---	---	---
MONROE COUNTY	31,241	31,610	33,019
Urban	11,401	11,905	13,563
Sparta City	6,080	6,258	6,646
Tomah City	5,321	5,647	6,917
Rural	19,840	19,705	19,456

Table 3

Area	1960	1970	1975
OCONTO COUNTY	25,110	25,553	27,615
Urban	4,805	7,184	4,972
Oconto City	4,805	4,667	4,972
Oconto Falls City	(2,331)	2,517	(2,467)
Rural	20,305	18,369	22,643
ONEIDA COUNTY	22,112	24,427	28,302
Urban	8,790	8,218	8,703
Rhinelander City	8,790	8,218	8,703
Rural	13,322	16,209	19,599
OUTAGAMIE COUNTY[b]	101,794	119,398	125,471
Urban	68,497	80,076	83,854
Combined Locks Village	(1,421)	2,771	3,128
Kimberly Village	5,322	6,131	6,260
Little Chute Village	5,099	5,522	6,330
Appleton City	46,758	52,976	55,334
Kaukauna City	10,096	11,308	11,430
New London City	1,222	1,368	1,372
Rural	33,297	39,322	41,617
OZAUKEE COUNTY[b]	38,441	54,461	64,932
Urban	26,076	37,902	45,930
Cedarburg City	5,191	7,697	9,766
Grafton village	3,748	5,998	7,983
Mequon City	8,543	12,150	14,820
Port Washington City	5,984	8,752	9,434
Thiensville Village	2,507	3,182	3,819
Bayside Village	103	123	108
Rural	12,365	16,559	19,002

Table 3

Area	1960	1970	1975
PEPIN COUNTY	7,332	7,319	7,364
Urban	---	---	---
Rural	7,332	7,319	7,364
PIERCE COUNTY	22,503	26,652	28,539
Urban	4,232	6,247	9,124
Prescott City	(1,536)	(2,331)	2,675
River Falls City	4,232	6,247	6,449
Rural	18,271	20,405	19,415
POLK COUNTY	24,968	26,666	29,465
Urban	---	---	---
Rural	24,968	26,666	29,465
PORTAGE COUNTY	36,964	47,541	52,272
Urban	17,837	23,479	27,001
Plover Village	---	---	3,111
Stevens Point City	17,837	23,479	23,890
Rural	19,127	24,062	25,271
PRICE COUNTY	14,370	14,520	15,013
Urban	2,919	2,953	2,970
Park Falls City	2,919	2,953	2,970
Rural	11,451	11,567	12,043

Table 3

Area	1960	1970	1975
RACINE COUNTY[b]	141,781	170,838	178,916
Urban	95,264	127,058	131,933
Sturtevant Village	(1,488)	3,376	4,354
Union Grove Village	(1,970)	2,703	3,020
Burlington City	5,856	7,479	8,705
Racine City	89,144	95,162	97,360
Elmwood Park Village	---	456	415
North Bay Village	264	263	249
Wind Point Village	(463)	1,251	1,292
Mount Pleasant Town	(12,358)	16,368	16,738
Rural	46,517	43,780	46,983
RICHLAND COUNTY	17,684	17,079	16,599
Urban	4,746	5,086	4,753
Richland Center City	4,746	5,086	4,753
Rural	12,938	11,993	11,846
ROCK COUNTY[b]	113,913	131,970	137,179
Urban	83,263	102,146	106,114
Beloit City	32,846	35,729	36,208
Edgerton City	4,000	4,118	4,353
Evansville City	2,858	2,992	3,174
Janesville City	35,164	46,426	49,656
Milton City	(1,671)	3,699	4,336
Beloit Town	8,395	9,182	8,387
Rural	30,650	29,824	31,065
RUSK COUNTY	14,794	14,238	14,705
Urban	3,584	3,674	3,560
Ladysmith City	3,584	3,674	3,560
Rural	11,210	10,564	11,145

Table 3

Area	1960	1970	1975
ST. CROIX COUNTY	29,164	34,354	39,057
Urban	8,266	9,747	10,959
Hudson City	4,325	5,049	5,760
New Richmond City	3,316	3,707	3,968
River Falls City	625	991	1,231
Rural	20,898	24,607	28,098
SAUK COUNTY	37,167	39,057	40,734
Urban	12,031	12,516	15,248
Sauk City Village	(2,095)	(2,385)	2,656
Baraboo City	7,660	7,931	7,907
Reedsburg City	4,371	4,585	4,685
Rural	25,136	26,541	25,486
SAWYER COUNTY	9,475	9,670	10,863
Urban	---	---	---
Rural	9,475	9,670	10,863
SHAWANO COUNTY	34,351	32,650	34,182
Urban	6,103	6,488	6,796
Shawano City	6,103	6,488	6,796
Rural	28,248	26,162	27,386
SHEBOYGAN COUNTY	86,484	96,660	99,324
Urban	54,936	59,065	60,580
Plymouth City	5,128	5,810	6,160
Sheboygan City	45,747	48,484	49,235
Sheboygan Falls City	4,061	4,771	5,185
Rural	31,548	37,595	38,744

Table 3

Area	1960	1970	1975
TAYLOR COUNTY	17,843	16,958	18,145
Urban	3,260	3,454	3,771
Medford City	3,260	3,454	3,771
Rural	14,583	13,504	14,374
TREMPEALEAU COUNTY	23,377	23,344	24,567
Urban	---	---	---
Rural	23,377	23,344	24,567
VERNON COUNTY	25,663	24,557	24,807
Urban	3,926	3,739	3,637
Viroqua City	3,926	3,739	3,637
Rural	21,737	20,818	21,170
VILAS COUNTY	9,332	10,958	12,896
Urban	---	---	---
Rural	9,332	10,958	12,896
WALWORTH COUNTY	52,368	63,444	67,511
Urban	19,741	24,537	24,701
Delavan City	4,846	5,526	5,786
Elkhorn City	3,586	3,992	4,345
Lake Geneva City	4,929	4,890	5,323
Whitewater City	6,380	10,129	9,247
Rural	32,627	38,907	42,810
WASHBURN COUNTY	10,301	10,601	11,784
Urban	---	---	---
Rural	10,301	10,601	11,784

Table 3

Area	1960	1970	1975
WASHINGTON COUNTY	46,119	63,839	76,579
Urban	15,596	30,028	36,062
Germantown Village	(622)	6,974	8,539
Hartford City	5,627	6,499	7,225
Milwaukee City	---	0	2
West Bend City	9,969	16,555	20,296
Rural	30,523	33,811	40,517
WAUKESHA COUNTY[b]	158,249	231,335	262,746
Urban	98,914	178,320	205,462
Elm Grove Village	4,994	7,201	7,692
Hartland Village	(2,088)	2,763	4,096
Menominee Falls Village	18,276	31,697	33,429
Mukwonago Village	(1,877)	(2,367)	3,132
Pewaukee Village	(2,484)	3,271	4,379
Sussex Village	(1,087)	2,758	4,112
Brookfield City	19,812	31,761	33,371
Delafield City	(2,334)	3,182	3,480
Muskego City	---	11,573	13,410
New Berlin City	15,788	26,910	31,333
Oconomowoc City	6,682	8,741	10,337
Waukesha City	30,004	39,695	47,744
Big Bend Village	(797)	1,148	1,439
Butler Village	2,274	2,261	2,230
Lannon Village	1,084	1,056	1,161
Brookfield Town	(1,990)	4,303	4,117
Rural	59,335	53,015	57,284
WAUPACA COUNTY	35,340	37,780	39,811
Urban	12,828	13,375	13,670
Clintonville City	4,778	4,600	4,541
New London City	4,066	4,433	4,661
Waupaca City	3,984	4,342	4,468
Rural	22,512	24,405	26,141

Table 3

Area	1960	1970	1975
WAUSHARA COUNTY	13,497	14,795	15,897
Urban	45	41	55
Berlin City	45	41	55
Rural	13,452	14,754	15,842
WINNEBAGO COUNTY[b]	107,928	129,946	130,813
Urban	77,814	99,502	101,732
Menasha City	14,674	14,836	14,997
Neenah City	18,057	22,902	23,736
Omro City	(1,991)	(2,341)	2,622
Oshkosh City	45,110	53,082	51,134
Menasha Town	(5,480)	8,682	9,243
Rural	30,114	30,444	29,081
WOOD COUNTY	59,105	65,362	68,233
Urban	31,710	34,147	34,435
Marshfield City	14,153	15,560	16,297
Wisconsin Rapids City	15,042	18,587	18,138
Nekoosa City	2,515	(2,409)	(2,442)
Rural	27,395	31,215	33,798

( ) Parentheses denote populations not counted as urban for that year.

a. Urban-rural definition differs slightly from that of U.S. Census. See text.

b. County contains unincorporated urban places. See text and Methodological Appendix.

Table 4

Average Annual Percent Change for the Total Urban and Rural Populations Of Wisconsin Counties, 1960 to 1970 and 1970 to 1975[a]

Area		
ADAMS COUNTY	2.0	3.8
Urban	---	---
Rural	2.0	3.8
ASHLAND COUNTY	-0.4	-0.9
Urban	-0.5	-1.1
Rural	-0.2	-0.6
BARRON COUNTY	-0.1	1.2
Urban	0.0	1.1
Rural	-0.1	1.2
BAYFIELD COUNTY	-0.2	1.1
Urban	---	---
Rural	-0.2	1.1
BROWN COUNTY	2.3	1.5
Urban	2.5	1.5
Rural	1.6	1.5
BUFFALO COUNTY	-0.3	0.4
Urban	---	---
Rural	-0.3	0.4

Table 4

Area	1960 to 1970	1970 to 1975
BURNETT COUNTY	0.1	2.8
Urban	---	---
Rural	0.1	2.8
CALUMET COUNTY	2.1	1.4
Urban	4.0[c]	2.6
Rural	1.6[c]	0.5
CHIPPEWA COUNTY	0.6	0.8
Urban	0.7	1.6
Rural	0.5	0.4
CLARK COUNTY	-0.4	0.7
Urban	0.1	0.5
Rural	-0.4	0.8
COLUMBIA COUNTY	0.9	0.9
Urban	0.3	0.4
Rural	1.2	1.1
CRAWFORD COUNTY	-0.7	0.5
Urban	-0.2	0.6
Rural	-1.0	0.4
DANE COUNTY	2.7	1.0
Urban	2.7[c]	0.3[c]
Rural	2.7[c]	3.3[c]

Table 4

Area	1960 to 1970	1970 to 1975
DODGE COUNTY	0.9	0.9
Urban	0.7	0.7
Rural	1.1	1.0
DOOR COUNTY	-0.3	1.9
Urban	-0.8	1.9
Rural	0.0	1.9
DOUGLAS COUNTY	-0.1	-0.4
Urban	-0.4	-1.2
Rural	0.8	1.6
DUNN COUNTY	1.0	0.6
Urban	2.5	-1.1
Rural	0.2	1.5
EAU CLAIRE COUNTY	1.4	1.4
Urban	1.6[c]	1.6
Rural	1.1[c]	0.9
FLORENCE COUNTY	-0.4	1.2
Urban	---	---
Rural	-0.4	1.2
FOND DU LAC COUNTY	1.1	0.7
Urban	1.0	0.8
Rural	1.4	0.5

Table 4

Area	1960 to 1970	1970 to 1975
FOREST COUNTY	0.2	1.2
Urban	---	---
Rural	0.2	1.2
GRANT COUNTY	0.9	0.8
Urban	1.8	-0.6
Rural	0.4	1.4
GREEN COUNTY	0.3	1.3
Urban	0.7[c]	2.0
Rural	0.1[c]	0.8
GREEN LAKE COUNTY	0.9	0.5
Urban	1.0	-0.3
Rural	0.9	0.9
IOWA COUNTY	-0.2	0.1
Urban	1.1	0.6
Rural	-0.4	0.0
IRON COUNTY	-1.8	0.4
Urban	-1.3[c]	---
Rural	-2.1[c]	0.5
JACKSON COUNTY	0.1	0.5
Urban	0.2	1.0
Rural	0.1	0.3

Table 4

Area	1960 to 1970	1970 to 1975
JEFFERSON COUNTY	1.8	0.9
Urban	1.5[c]	0.9
Rural	2.1[c]	1.0
JUNEAU COUNTY	0.5	0.2
Urban	-0.2	-0.6
Rural	0.7	0.4
KENOSHA COUNTY	1.6	1.4
Urban	1.5	1.2[c]
Rural	1.8	1.8[c]
KEWAUNEE COUNTY	0.4	0.3
Urban	0.4	-0.7
Rural	0.3	0.8
LA CROSSE COUNTY	1.0	0.6
Urban	1.0[c]	-0.1
Rural	1.2[c]	2.6
LAFAYETTE COUNTY	-0.4	0.9
Urban	---	---
Rural	-0.4	0.9
LANGLADE COUNTY	-0.4	0.2
Urban	-0.7	-0.3
Rural	0.0	0.6

Table 4

Area	1960 to 1970	1970 to 1975
LINCOLN COUNTY	0.5	1.4
Urban	0.1	0.4
Rural	1.0	2.5
MANITOWOC COUNTY	0.9	0.1
Urban	0.6	-0.2
Rural	1.4	0.7
MARATHON COUNTY	0.9	1.3
Urban	0.2[c]	1.4[c]
Rural	1.5[c]	1.3[c]
MARINETTE COUNTY	0.3	0.7
Urban	-0.2	-0.4
Rural	0.7	1.5
MARQUETTE COUNTY	0.4	1.8
Urban	---	---
Rural	0.4	1.8
MENOMINEE	---	0.3
Urban	---	---
Rural	---	0.3
MILWAUKEE COUNTY	0.2	-0.8
Urban	0.2	-0.8
Rural	---	---

Table 4

Area	1960 to 1970	1970 to 1975
MONROE COUNTY	0.1	0.9
Urban	0.4	2.6
Rural	-0.1	-0.3
OCONTO COUNTY	0.2	1.6
Urban	-0.3[c]	0.7[c]
Rural	0.3[c]	1.9[c]
ONEIDA COUNTY	1.0	2.9
Urban	-0.7	1.1
Rural	2.0	3.8
OUTAGAMIE COUNTY	1.6	1.0
Urban	1.2[c]	0.9
Rural	2.3[c]	1.1
OZAUKEE COUNTY	3.4	3.5
Urban	3.7	3.8
Rural	2.9	2.7
PEPIN COUNTY	0.0	0.1
Urban	---	---
Rural	0.0	0.1
PIERCE COUNTY	1.7	1.4
Urban	3.8	0.6[c]
Rural	1.1	1.6[c]

Table 4

Area	1960 to 1970	1970 to 1975
POLK COUNTY	0.7	2.0
Urban	---	---
Rural	0.7	2.0
PORTAGE COUNTY	2.5	1.9
Urban	2.7	0.3[c]
Rural	2.3	3.3[c]
PRICE COUNTY	0.1	0.7
Urban	0.1	0.1
Rural	0.1	0.8
RACINE COUNTY	1.9	0.9
Urban	0.8[c]	0.8
Rural	3.7[c]	1.4
RICHLAND COUNTY	-0.3	-0.6
Urban	0.7	-1.4
Rural	-0.8	-0.2
ROCK COUNTY	1.5	0.8
Urban	1.7[c]	0.8
Rural	0.9[c]	0.8
RUSK COUNTY	-0.4	0.6
Urban	0.2	-0.6
Rural	-0.6	1.1

Table 4

Area	1960 to 1970	1970 to 1975
ST. CROIX COUNTY	1.6	2.6
Urban	1.6	2.3
Rural	1.6	2.6
SAUK COUNTY	0.5	0.8
Urban	0.4	0.1[c]
Rural	0.5	1.2[c]
SAWYER COUNTY	0.2	2.3
Urban	---	---
Rural	0.2	2.3
SHAWANO COUNTY	-0.5	0.9
Urban	0.6	0.9
Rural	-0.8	0.9
SHEBOYGAN COUNTY	1.1	0.5
Urban	0.7	0.5
Rural	1.7	0.6
TAYLOR COUNTY	-0.5	1.4
Urban	0.6	1.8
Rural	-0.8	1.2
TREMPEALEAU COUNTY	0.0	1.0
Urban	---	---
Rural	0.0	1.0

Table 4

Area	1960 to 1970	1970 to 1975
VERNON COUNTY	-0.4	0.2
Urban	-0.5	-0.6
Rural	-0.4	0.3
VILAS COUNTY	1.6	3.2
Urban	---	---
Rural	1.6	3.2
WALWORTH COUNTY	1.9	1.2
Urban	2.2	0.1
Rural	1.8	1.9
WASHBURN COUNTY	0.3	2.1
Urban	---	---
Rural	0.3	2.1
WASHINGTON COUNTY	3.2	3.6
Urban	3.9[c]	3.7[c]
Rural	2.9[c]	3.6[c]
WAUKESHA COUNTY	3.8	2.5[c]
Urban	4.1[c]	2.5[c]
Rural	3.2[c]	2.6[c]
WAUPACA COUNTY	0.7	1.0
Urban	0.4	0.4
Rural	0.8	1.4

Table 4

Area	1960 to 1970	1970 to 1975
WAUSHARA COUNTY	0.9	1.4
Urban	-0.9	5.8
Rural	0.9	1.4
WINNEBAGO COUNTY	1.9	0.1
Urban	1.5[c]	-0.1[c]
Rural	2.6[c]	0.8[c]
WOOD COUNTY	1.0	0.9
Urban	1.4[c]	0.2
Rural	0.5[c]	1.6

a. Urban-Rural definition differs slightly from that of the U.S. Census. See text.

c. One or more places changed in urban-rural classification during the period. These change rates are based on a constant urban-rural classification determined at the beginning of each period.

METHODOLOGICAL APPENDIX

Urban and Rural Determination

The definitions of urban and rural used herein differ slightly from those used by the U.S. Census. According to the U.S. Census, the urban population includes all persons living in: (1) incorporated cities and villages of 2,500 or more population; (2) the densely settled urban fringe, whether incorporated or unincorporated, of urbanized areas; or (3) unincorporated places of 2,500 or more inhabitants. The balance of the population is considered rural. It is in the treatment of urban conditions (2) and (3) dealing with unincorporated areas classified as urban, that the difference between the Census definition and that used here occurs. Since the 1975 estimates were computed for towns and incorporated cities and villages only, the population of unincorporated areas classified as urban in the Census must be approximated for 1975.

To accomplish this, the relative population sizes in 1970 of unincorporated areas defined as urban in the Censuses and the towns in which they are located are used to determine whether the town should be counted as urban in 1975. If an unincorporated urban area comprised 50% or more of a town's population in 1970, then the entire town is counted as urban in 1975. If the proportion of urban was less than 50% in 1970, the entire town is counted as rural in 1975. In order to maintain consistency of urban and rural definitions from 1960 to 1975, the same criteria used for 1975 to determine urban or rural status are applied to the 1970 and 1960 data. Thus, if an unincorporated urban area comprised 50% or more of the town's population in 1960 or 1970,

then the entire town is counted as rural.

The counties in which these criteria have been applied to the urban-rural classification of towns containing unincorporated urban areas have been footnoted with a "b" on Table 3. Detailed information for towns containing unincorporated urban areas is presented in Appendix Tables A and B. Shown in the Appendix Tables for each of these towns in 1960 and 1970 are the total population, the unincorporated urban portion according to the U.S. Census, and the percent urban.

For the state as a whole, the difference is small between the urban-rural criteria used here and the standard census definition. In 1960, the U.S. Census classified 59,629 residents of unincorporated areas as urban. With the methods used here 51,629 are classified as urban in Table 1, leaving a difference of 7,845, or only 0.3% of the state urban population in 1960. For 1970, the comparable figures are 97,347 urban in the U.S. Census, and 88,346 in Table 1, leaving 9,001 which is again 0.3% of the state urban population.

For individual highly urbanized counties which contain many of these unincorporated urban areas, the effects of using the above urban-rural determination may vary, and these particular effects are shown in Appendix Tables A and B.

Average Annual Rates of Change

The formula for calculating average annual rates of change is as follows:

$$\text{Average Annual Rates of Change} = \frac{Px - Py}{(Px + Py)/2} \times 1/n \times 100$$

where: Px = Population at the end of the period

Py = Population at the beginning of the period

n = Length of the period in years.

In the calculation of the rate, the growth in population over the period (Px - Py) is divided by the average size of the population over the period ((Px = Py)/2), annualized by dividing by the length of the period in years (n), and expressed in terms of percent by multiplying by 100. The average annual percent change has two advantages for the measurement of change. First, as a measure of average growth, the increase in population is compared with the average of the initial and final populations to calculate the average percent change. The use of an average prevents the length of a period from having an inordinate effect on the size of the growth rates. In a growing population when the change is taken as a percent of the initial population, some inflation of the growth rate may result. The longer the period, the smaller the initial population will be relative to the final population, and the higher the resultant growth rate. Thus, growth rates from different length periods are more comparable when they are expressed in terms of the average population over the period. Also, the use of the average population as the base for calculating the rate of growth allows for the fact that during the period, once persons are added to the population, they become part of the base population on which future increases occur.

Second, since the average annual rate of growth is expressed in terms of percent per year, the growth rates from different length periods (e.g. 1960 to 1970 and 1970 to 1975) can be compared directly.

In order to evaluate the growth of urban and rural populations the calculations of the average annual rates of change are executed on an urban-rural groupings of cities, villages, and townships determined at the beginning of each period. The average annual rate of change then reflect the actual growth or decline of urban or rural populations

only, and not a change in the classification of a place as urban or rural. Thus, when a place classified as rural at the beginning of a period has population growth sufficient to qualify it as urban at the end of the period, that growth is still interpreted as rural growth in the rates of growth.

For example, if a city or village population increase over the 2,500 minimum, or was incorporated with more than 2,500 during the period, it is classified as rural in the calculation of the urban and rural rates of change over that period. The same rule applies to a place dropping below 2,500 during the period. If it contained 2,500 or more at the beginning of the period, it was classified as urban for that period.

The effect of this constant urban-rural grouping for the calculation of rates of change can be seen clearly by examining the figures for Iron county on Tables 3 and 4. Between 1960 and 1970 Hurley city in Iron county dropped in population from 2,763 to 2,418. Since Hurley city was the only urban place in Iron county in 1960, its dropping below 2,500 left no urban population in Iron county. However, since Hurley city was urban in 1960, at the beginning of the period, it is considered urban at the end of the period, 1970, for the calculation of the rates of change. Therefore, the annual percent change for the Iron county urban population 1960 to 1970 is -1.3%, reflecting Hurley city's decline from 2,763 to 2,418 population.

Where there has been a change in urban-rural classification in a area during a period which is ignored in the calculation of the rate of change over the period, that rate of change has been footnoted with a "c" on Table 4.

Appendix Table A

Wisconsin Townships with Unincorporated Areas Classified as Urban by the U.S. Census, 1960

Township	Population	Urban Population Number	Urban Population Percent
BROWN COUNTY			
Allouez	9,577*	9,439	98.8
Ashwaubenon	2,657*	1,369	51.5
Preble	12,245*	9,936	81.1
DANE COUNTY			
Blooming Grove	9,709*	7,942	81.8
Burke	1,511	146	9.7
Fitchburg	2,880*	295	10.2
Madison	4,925*	4,746	96.4
Middleton	1,481	234	15.8
KENOSHA COUNTY			
Pleasant Prairie	10,287	3,073	29.9
Somers	7,139	1,880	26.3
MARATHON COUNTY			
Rib Mountain	3,381*	1,097	32.4
Stettin	4,141*	3,008	72.6
OZAUKEE COUNTY			
Cedarberg	2,248	23	1.0
RACINE COUNTY			
Caledonia	9,696	2,103	21.7
Mount Pleasant	12,358	5,620	45.5
ROCK COUNTY			
Beloit	8,395*	4,475	53.3
WAUKESHA COUNTY			
Muskego	8,888	3,571	40.2
Waukesha	3,540	517	14.6

*Whole township population classified as urban in 1960.

Appendix Table B

Wisconsin Townships with Unincorporated Areas Classified as Urban by the U.S. Census, 1970 and Total 1975 Population

Township	1970 Urban Population Number	1970 Urban Population Percent	1970 Total Population	1975 Total Population
BROWN COUNTY				
Allouez	13,753	100.0%	13,753*	15,474*
Ashwaubenon	9,323	92.8	10,042*	12,885*
CALUMET COUNTY				
Harrison	3	0.1	3,260	3,420
DANE COUNTY				
Blooming Grove	1,001	62.3	1,608*	1,403*
Burke	202	11.6	1,742	1,828
Cottage Grove	4	0.2	1,818	2,082
Fitchburg	993	21.1	4,704*	8,456*
Madison	4,353	75.8	5,746*	5,978*
Middleton	374	18.4	2,028	1,913
KENOSHA COUNTY				
Pleasant Prairie	3,682	30.6	12,019	12,290
Somers	1,775	24.4	7,270	7,325
LA CROSSE COUNTY				
Campbell	3,290	98.9	3,327*	3,654*
Shelby	879	23.5	3,733	4,002
MARATHON COUNTY				
Rib Mountain	3,789	79.2	4,785*	5,285*
Stettin	2,610	62.2	4,199*	4,383*
Weston	3,375	53.1	6,351*	8,320*
OUTAGAMIE COUNTY				
Buchanan	40	2.0	1,987	1,889
Grand Chute	1,207	17.0	7,089	7,108
Kaukana	0	0	961	1,036

Appendix Table B

Township	1970 Urban Population Number	1970 Urban Population Percent	1970 Total Population	1975 Total Population
OZAUKEE COUNTY				
Grafton	324	10.4	3,127	3,165
RACINE COUNTY				
Caledonia	8,149	48.7	16,748*	18,581*
Mount Pleasant	10,009	61.2	16,368*	16,738*
Norway	1,204	26.1	4,620	4,654
ROCK COUNTY				
Beloit	5,912	64.3	9,182*	8,387*
WAUKESHA COUNTY				
Brookfield	2,274	52.8	4,303*	4,117*
Delafield	1,708	45.5	3,750	3,583
Lisbon	62	1.3	4,709	6,290
Merton	173	3.9	4,424	4,837
Oconomowoc	2,961	49.3	6,010	6,194
Pewaukee	3,051	40.4	7,551	8,234
Vernon	46	1.6	2,857	3,511
Waukesha	742	16.8	4,408	4,832
WINNEBAGO COUNTY				
Algoma	519	16.4	3,158	3,196
Black Wolf	788	37.0	2,127*	2,257*
Menasha	6,457	74.4	8,682*	9,243*
Neenah	1,363	46.3	2,942	2,893
Oshkosh	952	19.3	4,943	4,675

*Whole township classified as urban in 1970 and 1975.